

in these two cases. The large limbs have been cut back within a foot or two of their union with the trunk. From the stubs numerous sprouts have made their appearance, and on these much more fruit is produced than upon the fruiting branches of the ordinary crown. The tree from which this budwood was taken has a trunk about 10 inches in diameter, and the crown is now about 10 feet broad. I counted over 50 fruits on the tree, which is a large crop for a cherimoya. The fruits are heart-shaped or bluntly conical; much freer from irregularities than many varieties; and of large size, averaging about a pound in weight. The surface is clean and almost smooth, the carpellary areas being indicated by raised lines. This is a variety of pleasing form and appearance, of good size for handling and marketing, and the quality seems to be good. It ripens earlier here than most of the other seedlings, the first fruits having already dropped, while the fruits on most of the other trees I have seen are still immature. It should be tried in California." (Popenoe.)

Annona cherimola Miller. (Annonaceae.) 45021. **Cherimoya** cuttings from Guatemala. Collected by Mr. Wilson Popenoe, of this Bureau. "(No. 165. From the sitio of Julio Guerra, Antigua. July 16, 1917.) A prolific variety of the *cherimoya*, or *anona*, as it is called in the Guatemalan highlands. The tree is small, though not young. Apparently it has been cut back heavily, leaving only one limb of the several which formerly composed the crown. The height of the tree at present is about 15 feet, while the trunk is about 8 inches thick at the base. The crown is slender and unsymmetrical. At this date (July 16) the tree is carrying 102 young fruits, and is still flowering. The season of ripening is from November to January. In form the fruits are cordate to conical. When ripe the larger ones will weigh more than one pound. The surface is rough, the carpellary areas on some specimens giving rise to short protuberances, while on other specimens the protuberances are almost wanting. Julio Guerra says 'the ripe fruit has very white flesh and is of good quality.' The unusual productiveness of the parent tree commends the variety for trial in California and Florida." (Popenoe.)

Asimina triloba (L.) Dunal. (Annonaceae.) 45019. **Pawpaw** cuttings from De Kalb, Missouri. Presented by Mr.